

tions on projects, programs, and information exchange and recommendations for legislation, that the Advisory Board considers appropriate regarding the Strategic Environmental Research and Development Program.”

1997—Subsec. (b)(4). Pub. L. 105-85 substituted “not less than two and not more than four” for “three years”.

1991—Subsec. (a). Pub. L. 102-190, §257(b)(1), substituted “14 members” for “13 members”.

Subsec. (b)(1). Pub. L. 102-190, §257(b)(2), added par. (1) and struck out former par. (1) which read as follows: “The Science Advisor to the President, or his designee, shall be a permanent member of the Advisory Board.”

INITIAL APPOINTMENTS OF ADVISORY BOARD MEMBERS

Pub. L. 101-510, div. A, title XVIII, §1801(b), Nov. 5, 1990, 104 Stat. 1757, directed Secretary of Defense and Secretary of Energy to make the appointments required by 10 U.S.C. 2904(a) not later than 60 days after Nov. 5, 1990, and provided that up to one-half of the members originally appointed to the Strategic Environmental Research and Development Program Scientific Advisory Board could be appointed for terms of not more than six and not less than two years in order to provide for staggered expiration of the terms of members.

FIRST ANNUAL REPORT OF ADVISORY BOARD

Pub. L. 101-510, div. A, title XVIII, §1801(d), Nov. 5, 1990, 104 Stat. 1758, directed that first annual report of the Strategic Environmental Research and Development Program Scientific Advisory Board be submitted not later than Mar. 15, 1992.

TERMINATION OF ADVISORY BOARDS

Advisory boards established after Jan. 5, 1973, to terminate not later than the expiration of the 2-year period beginning on the date of their establishment, unless, in the case of a board established by the President or an officer of the Federal Government, such board is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a board established by the Congress, its duration is otherwise provided for by law. See sections 3(2) and 14 of Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 770, 776, set out in the Appendix to Title 5, Government Organization and Employees.

CHAPTER 173—ENERGY SECURITY

Table with 2 columns: Subchapter and Sec. Subchapter I. Energy Security Activities ..... 2911 Subchapter II. Energy-Related Procurement ..... 2922 Subchapter III. General Provisions ..... 2924

AMENDMENTS

2011—Pub. L. 112-81, div. B, title XXVIII, §2821(a)(2)(A), Dec. 31, 2011, 125 Stat. 1691, substituted “2924” for “2925” in item III.

2011—Pub. L. 111-383, div. A, title X, §1075(b)(47), Jan. 7, 2011, 124 Stat. 4371, inserted “Sec.” above “2911”.

SUBCHAPTER I—ENERGY SECURITY ACTIVITIES

Table with 2 columns: Sec. and description. 2911. Energy policy of the Department of Defense. 2912. Availability and use of energy cost savings. 2913. Energy savings contracts and activities. 2914. Energy resilience and conservation construction projects. 2915. Facilities: use of renewable forms of energy and energy efficient products. 2916. Sale of electricity from alternate energy and cogeneration production facilities. 2917. Development of geothermal energy on military lands. 2918. Fuel sources for heating systems; prohibition on converting certain heating facilities.

Sec. 2919.

Department of Defense participation in programs for management of energy demand or reduction of energy usage during peak periods.

AMENDMENTS

2019—Pub. L. 116-92, div. A, title XVII, §1731(a)(59), Dec. 20, 2019, 133 Stat. 1815, which directed amendment of the analysis at the beginning of this chapter by substituting “Energy resilience and conservation construction projects” for “Energy resiliency and conservation construction projects” in item 2914, was executed in the analysis for this subchapter to reflect the probable intent of Congress.

2018—Pub. L. 115-232, div. A, title X, §1081(c)(6), Aug. 13, 2018, 132 Stat. 1985, made technical amendment to directory language of Pub. L. 115-91, §2831(b), effective as of Dec. 12, 2017, and as if included in Pub. L. 115-91 as enacted. See 2017 Amendment note below.

2017—Pub. L. 115-91, div. B, title XXVIII, §2831(b), Dec. 12, 2017, 131 Stat. 1857, as amended by Pub. L. 115-232, div. A, title X, §1081(c)(6), Aug. 13, 2018, 132 Stat. 1985, which directed amendment of the analysis at the beginning of this chapter by adding item 2911 and striking out former item 2911 “Energy performance goals and master plan for the Department of Defense”, was executed in the analysis for this subchapter to reflect the probable intent of Congress.

2016—Pub. L. 114-328, div. B, title XXVIII, §2805(a)(2), Dec. 23, 2016, 130 Stat. 2714, which directed amendment of the analysis at the beginning of this chapter by adding item 2914 and striking out former item 2914 “Energy conservation construction projects”, was executed in the analysis for this subchapter to reflect the probable intent of Congress.

2011—Pub. L. 111-383, div. B, title XXVIII, §2832(c)(2), Jan. 7, 2011, 124 Stat. 4470, added items 2911 and 2915 and struck out former items 2911 “Energy performance goals and plan for Department of Defense” and 2915 “New construction: use of renewable forms of energy and energy efficient products”.

2009—Pub. L. 111-84, div. B, title XXVIII, §2843(b), Oct. 28, 2009, 123 Stat. 2682, added item 2919.

§ 2911. Energy policy of the Department of Defense

(a) GENERAL ENERGY POLICY.—The Secretary of Defense shall ensure the readiness of the armed forces for their military missions by pursuing energy security and energy resilience.

(b) AUTHORITIES.—In order to achieve the policy set forth in subsection (a), the Secretary of Defense may—

(1) establish metrics and standards for the assessment of energy resilience;

(2) require the Secretary of a military department to perform mission assurance and readiness assessments of energy power systems for mission critical assets and supporting infrastructure, applying uniform mission standards established by the Secretary of Defense;

(3) require the Secretary of a military department to establish and maintain an energy resilience master plan for an installation;

(4) authorize the use of energy security and energy resilience, including the benefits of on-site generation resources that reduce or avoid the cost of backup power, as factors in the cost-benefit analysis for procurement of energy; and

(5) in selecting facility energy projects that will use renewable energy sources, pursue energy security and energy resilience by giving

favorable consideration to projects that provide power directly to a military facility or into the installation electrical distribution network.

(c) ENERGY PERFORMANCE GOALS.—(1) The Secretary of Defense shall submit to the congressional defense committees the energy performance goals for the Department of Defense regarding transportation systems, support systems, utilities, and infrastructure and facilities.

(2) The energy performance goals shall be submitted annually not later than the date on which the President submits to Congress the budget for the next fiscal year under section 1105 of title 31 and cover that fiscal year as well as the next five, 10, and 20 years. The Secretary shall identify changes to the energy performance goals since the previous submission.

(3) The Secretary of Defense shall include the energy security and resilience goals of the Department of Defense in the installation energy report submitted under section 2925(a) of this title for fiscal year 2018 and every fiscal year thereafter. In the development of energy security and resilience goals, the Department of Defense shall conform with the definitions of energy security and resilience under this title. The report shall include the amount of critical energy load, together with the level of availability and reliability by fiscal year the Department of Defense deems necessary to achieve energy security and resilience.

(d) ENERGY PERFORMANCE MASTER PLAN.—(1) The Secretary of Defense shall develop a comprehensive master plan for the achievement of the energy performance goals of the Department of Defense, as set forth in laws, executive orders, and Department of Defense policies.

(2) The master plan shall include the following:

(A) A separate master plan, developed by each military department and Defense Agency, for the achievement of energy performance goals.

(B) The use of a baseline standard for the measurement of energy consumption by transportation systems, support systems, utilities, and facilities and infrastructure that is consistent for all of the military departments.

(C) A method of measurement of reductions or conservation in energy consumption that provides for the taking into account of changes in the current size of fleets, number of facilities, and overall square footage of facility plants.

(D) Metrics to track annual progress in meeting energy performance goals.

(E) A description of specific requirements, and proposed investments, in connection with the achievement of energy performance goals reflected in the budget of the President for each fiscal year (as submitted to Congress under section 1105(a) of title 31).

(F) The up-to date list of energy-efficient products maintained under section 2915(e)(2) of this title.

(3) Not later than 30 days after the date on which the budget of the President is submitted to Congress for a fiscal year under section 1105(a) of title 31, the Secretary shall submit the current version of the master plan to Congress.

(e) SPECIAL CONSIDERATIONS.—For the purpose of developing and implementing the energy performance goals and energy performance master plan, the Secretary of Defense shall consider at a minimum the following:

(1) Opportunities to reduce the current rate of consumption of energy, the future demand for energy, and the requirement for the use of energy.

(2) Opportunities to enhance energy resilience to ensure the Department of Defense has the ability to prepare for and recover from energy disruptions that affect mission assurance on military installations.

(3) Opportunities to implement conservation measures to improve the efficient use of energy.

(4) Opportunities to pursue alternative energy initiatives, including the use of alternative fuels and hybrid-electric drive in military vehicles and equipment.

(5) Opportunities for the high-performance construction, lease, operation, and maintenance of buildings.

(6) Cost effectiveness, cost savings, and net present value of alternatives.

(7) The value of diversification of types and sources of energy used.

(8) The value of economies-of-scale associated with fewer energy types used.

(9) The value of the use of renewable energy sources.

(10) The value of incorporating electric, hybrid-electric, and high efficiency vehicles into vehicle fleets.

(11) The potential for an action to serve as an incentive for members of the armed forces and civilian personnel to reduce energy consumption or adopt an improved energy performance measure.

(12) Opportunities for improving energy security for facility energy projects that will use renewable energy sources.

(13) Opportunities to leverage financing provided by a non-Department entity to address installation energy needs.

(f) SELECTION OF ENERGY CONSERVATION MEASURES.—For the purpose of implementing the energy performance master plan, the Secretary of Defense shall provide that the selection of energy conservation measures, including energy efficient maintenance, shall be limited to those measures that—

(1) are readily available;

(2) demonstrate an economic return on the investment;

(3) are consistent with the energy performance goals and energy performance master plan for the Department; and

(4) are supported by the special considerations specified in subsection (c).

(g) GOAL REGARDING USE OF RENEWABLE ENERGY TO MEET FACILITY ENERGY NEEDS.—(1) It shall be the goal of the Department of Defense—

(A) to produce or procure not less than 25 percent of the total quantity of facility energy it consumes within its facilities during fiscal year 2025 and each fiscal year thereafter from renewable energy sources; and

(B) to produce or procure facility energy from renewable energy sources whenever the

use of such renewable energy sources is consistent with the energy performance goals and energy performance master plan for the Department and supported by the special considerations specified in subsection (c).

(2) To help ensure that the goal specified in paragraph (1)(A) regarding the use of renewable energy by the Department of Defense is achieved, the Secretary of Defense shall establish an interim goal for fiscal year 2018 for the production or procurement of facility energy from renewable energy sources.

(3)(A) The Secretary of Defense shall establish a policy to maximize savings for the bulk purchase of replacement renewable energy certificates in connection with the development of facility energy projects using renewable energy sources.

(B) Under the policy required by subparagraph (A), the Secretary of a military department shall submit requests for the purchase of replacement renewable energy certificates to a centralized purchasing authority maintained by such department or the Defense Logistics Agency with expertise regarding—

- (i) the market for renewable energy certificates;
- (ii) the procurement of renewable energy certificates; and
- (iii) obtaining the best value for the military department by maximizing the purchase of renewable energy certificates from projects placed into service before January 1, 1999.

(C) The centralized purchasing authority shall solicit industry for the most competitive offer for replacement renewable energy certificates, to include a combination of renewable energy certificates from new projects and projects placed into service before January 1, 1999.

(D) Subparagraph (B) does not prohibit the Secretary of a military department from entering into an agreement outside of the centralized purchasing authority if the Secretary will obtain the best value by bundling the renewable energy certificates with the facility energy project through a power purchase agreement or other contractual mechanism at the installation.

(E) Nothing in this paragraph shall be construed to authorize the purchase of renewable energy certificates to meet Federal goals or mandates in the absence of the development of a facility energy project using renewable energy sources.

(F) This policy does not make the purchase of renewable energy certificates mandatory, but the policy shall apply whenever original renewable energy certificates are proposed to be swapped for replacement renewable energy certificates.

(Added and amended Pub. L. 109-364, div. B, title XXVIII, §§ 2851(a)(1), 2852, Oct. 17, 2006, 120 Stat. 2489, 2496; Pub. L. 111-84, div. B, title XXVIII, § 2842, Oct. 28, 2009, 123 Stat. 2680; Pub. L. 111-383, div. B, title XXVIII, §§ 2831, 2832(a), Jan. 7, 2011, 124 Stat. 4467, 4468; Pub. L. 112-81, div. B, title XXVIII, §§ 2821(b)(1), 2822(b), 2823(a), 2824(a), 2825(b), Dec. 31, 2011, 125 Stat. 1691, 1692, 1694; Pub. L. 115-91, div. A, title III, § 312, div. B, title XXVIII, § 2831(a), Dec. 12, 2017, 131 Stat. 1348,

1857; Pub. L. 115-232, div. A, title III, § 312(a), (b), Aug. 13, 2018, 132 Stat. 1709, 1710; Pub. L. 116-92, div. A, title III, § 320(b), Dec. 20, 2019, 133 Stat. 1307.)

#### CODIFICATION

Section 312 of Pub. L. 115-91 amended subsec. (c) of this section, and section 2831(a)(2) and (4) of Pub. L. 115-91 respectively redesignated subsec. (c) as (e) and made amendments substantially identical to those made by section 312. Pub. L. 116-92 subsequently amended subsec. (e) to address the duplicate amendments. See 2019 and 2017 Amendment notes below.

#### AMENDMENTS

2019—Subsec. (e)(1), (2). Pub. L. 116-92, § 320(b)(1), added pars. (1) and (2) and struck out former pars. (1) and (2) which read as follows:

“(1) Opportunities to reduce the current rate of consumption of energy, the future demand for energy, and the requirement for the use of energy.

“(2) Opportunities to enhance energy resilience to ensure the Department of Defense has the ability to prepare for and recover from energy disruptions that impact mission assurance on military installations.”

Subsec. (e)(13). Pub. L. 116-92, § 320(b)(2), which directed striking out “the second paragraph (13)”, was executed by striking out the par. (13) added by Pub. L. 115-91, § 2831(a)(4)(C), which read as follows: “Opportunities to leverage third-party financing to address installation energy needs.” See 2017 Amendment note below.

2018—Subsec. (b). Pub. L. 115-232, § 312(a), added pars. (1) and (2) and redesignated former pars. (1) to (3) as (3) to (5), respectively.

Subsec. (c)(3). Pub. L. 115-232, § 312(b), added par. (3). 2017—Pub. L. 115-91, § 2831(a)(1), substituted “policy of” for “performance goals and master plan for” in section catchline.

Subsecs. (a) to (d). Pub. L. 115-91, § 2831(a)(2), (3), added subsecs. (a) and (b) and redesignated former subsecs. (a) and (b) as (c) and (d), respectively. Former subsecs. (c) and (d) redesignated (e) and (f), respectively.

Subsec. (e). Pub. L. 115-91, § 2831(a)(2), redesignated subsec. (c) as (e). Former subsec. (e) redesignated (g).

Subsec. (e)(1). Pub. L. 115-91, §§ 312(1), 2831(a)(4)(A), amended par. (1) identically, inserting “, the future demand for energy, and the requirement for the use of energy” after “consumption of energy”. See Codification note above.

Subsec. (e)(2). Pub. L. 115-91, §§ 312(2), 2831(a)(4)(B), made similar amendments to par. (2), resulting in substitution of “enhance energy resilience to ensure the Department of Defense has the ability to prepare for and recover from energy disruptions that impact mission assurance on military installations” for “reduce the future demand and the requirements for the use of energy”. See Codification note above.

Subsec. (e)(13). Pub. L. 115-91, § 2831(a)(4)(C), added par. (13) which read “Opportunities to leverage third-party financing to address installation energy needs.” See Codification note above.

Pub. L. 115-91, § 312(3), added par. (13) which read “Opportunities to leverage financing provided by a non-Department entity to address installation energy needs.” See Codification note above.

Subsecs. (f), (g). Pub. L. 115-91, § 2831(a)(2), redesignated subsecs. (d) and (e) as (f) and (g), respectively.

2011—Pub. L. 111-383, § 2832(a)(3), substituted “Energy performance goals and master plan for the Department of Defense” for “Energy performance goals and plan for Department of Defense” in section catchline.

Pub. L. 111-383, § 2832(a)(2), substituted “master plan” for “plan” wherever appearing in subsecs. (c) to (e).

Subsec. (b). Pub. L. 111-383, § 2832(a)(1), amended subsec. (b) generally. Prior to amendment, text read as follows: “The Secretary of Defense shall develop, and update as necessary, a comprehensive plan to help achieve the energy performance goals for the Department of Defense.”

Subsec. (b)(2)(F). Pub. L. 112–81, § 2825(b), added subpar. (F).

Subsec. (c)(4). Pub. L. 111–383, § 2831(1), inserted “and hybrid-electric drive” after “alternative fuels”.

Subsec. (c)(5) to (11). Pub. L. 111–383, § 2831(2)–(5), added pars. (5) and (10) and redesignated former pars. (5) to (8) and (9) as (6) to (9) and (11), respectively.

Subsec. (c)(12). Pub. L. 112–81, § 2822(b), added par. (12).

Subsec. (d). Pub. L. 112–81, § 2821(b)(1)(A), struck out par. (1) designation, redesignated subpars. (A) to (D) as pars. (1) to (4), respectively, and struck out former par. (2), which defined “energy efficient maintenance”.

Subsec. (e)(2). Pub. L. 112–81, § 2823(a), added par. (2). Pub. L. 112–81, § 2821(b)(1)(B), struck out par. (2), which defined “renewable energy source”.

Subsec. (e)(3). Pub. L. 112–81, § 2824(a), added par. (3). 2009—Subsec. (e). Pub. L. 111–84, § 2842(c), substituted “Facility Energy Needs” for “Electricity Needs” in heading.

Pub. L. 111–84, § 2842(a), (b), designated existing provisions as par. (1), redesignated former pars. (1) and (2) as subpars. (A) and (B), respectively, of par. (1), in par. (1)(A), substituted “facility energy” for “electric energy” and struck out “and in its activities” after “facilities” and “(as defined in section 203(b) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b)))” after “sources”, in par. (1)(B), substituted “facility energy” for “electric energy”, and added par. (2).

2006—Subsec. (e). Pub. L. 109–364, § 2852, added subsec. (e).

#### TERMINATION OF REPORTING REQUIREMENTS

For termination, effective Dec. 31, 2021, of provisions in subsecs. (a) and (b)(3) of this section requiring submittal of annual reports to Congress, see section 1061 of Pub. L. 114–328, set out as a note under section 111 of this title.

#### PILOT PROGRAM FOR AVAILABILITY OF WORKING-CAPITAL FUNDS FOR INCREASED COMBAT CAPABILITY THROUGH ENERGY OPTIMIZATION

Pub. L. 116–92, div. A, title III, § 337, Dec. 20, 2019, 133 Stat. 1316, provided that:

“(a) IN GENERAL.—Notwithstanding section 2208 of title 10, United States Code, the Secretary of Defense and the military departments may use a working capital fund established pursuant to that section for expenses directly related to conducting a pilot program for energy optimization initiatives described in subsection (b).

“(b) ENERGY OPTIMIZATION INITIATIVES.—Energy optimization initiatives covered by the pilot program include the research, development, procurement, installation, and sustainment of technologies or weapons system platforms, and the manpower required to do so, that would improve the efficiency and maintainability, extend the useful life, lower maintenance costs, or provide performance enhancement of the weapon system platform or major end item.

“(c) LIMITATION ON CERTAIN PROJECTS.—Funds may not be used pursuant to subsection (a) for—

- “(1) any product improvement that significantly changes the performance envelope of an end item; or
- “(2) any single component with an estimated total cost in excess of \$10,000,000.

“(d) LIMITATION IN FISCAL YEAR PENDING TIMELY REPORT.—If during any fiscal year the report required by paragraph (1) of subsection (e) is not submitted by the date specified in paragraph (2) of that subsection, funds may not be used pursuant to subsection (a) during the period—

- “(1) beginning on the date specified in such paragraph (2); and
- “(2) ending on the date of the submittal of the report.

“(e) ANNUAL REPORT.—

“(1) IN GENERAL.—The Secretary of Defense shall submit an annual report to the congressional defense committees [Committees on Armed Services and Ap-

propriations of the Senate and the House of Representatives] on the use of the authority under subsection (a) during the preceding fiscal year.

“(2) DEADLINE FOR SUBMITTAL.—The report required by paragraph (1) in a fiscal year shall be submitted not later than 60 days after the date of the submittal to Congress of the budget of the President for the succeeding fiscal year pursuant to section 1105 of title 31, United States Code.

“(3) RECOMMENDATION.—In the case of the report required to be submitted under paragraph (1) during fiscal year 2020, the report shall include the recommendation of the Secretary of Defense and the military departments regarding whether the authority under subsection (a) should be made permanent.

“(f) SUNSET.—The authority under subsection (a) shall expire on October 1, 2024.”

#### AGGREGATION OF ENERGY EFFICIENCY AND ENERGY RESILIENCE PROJECTS IN LIFE CYCLE COST ANALYSES

Pub. L. 115–91, div. B, title XXVIII, § 2837, Dec. 12, 2017, 131 Stat. 1859, provided that: “The Secretary of Defense or the Secretary of a military department, when conducting life cycle cost analyses with respect to investments designed to lower costs and reduce energy and water consumption, shall aggregate energy efficiency projects and energy resilience improvements as appropriate.”

#### ENERGY SECURITY FOR MILITARY INSTALLATIONS IN EUROPE

Pub. L. 116–92, div. B, title XXVIII, § 2821(a)–(c), Dec. 20, 2019, 133 Stat. 1888, provided that:

“(a) PROHIBITION ON USE OF CERTAIN ENERGY SOURCE.—The Secretary of Defense shall ensure that each contract for the acquisition of furnished energy for a covered military installation in Europe does not use any energy sourced from inside the Russian Federation as a means of generating the furnished energy for the covered military installation.

“(b) WAIVER FOR NATIONAL SECURITY INTERESTS.—

“(1) WAIVER AUTHORITY; CERTIFICATION.—The Secretary of Defense may waive application of subsection (a) to a specific contract for the acquisition of furnished energy for a covered military installation if the Secretary certifies to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] that—

“(A) the waiver of such subsection is necessary to ensure an adequate supply of furnished energy for the covered military installation; and

“(B) the Secretary has balanced these national security requirements against the potential risk associated with reliance upon the Russian Federation for furnished energy.

“(2) SUBMISSION OF WAIVER NOTICE.—Not later than 14 days before the execution of any energy contract for which a waiver is granted under paragraph (1), the Secretary of Defense shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] notice of the waiver. The waiver notice shall include the following:

“(A) The rationale for the waiver, including the basis for the certifications required by subparagraphs (A) and (B) of paragraph (1).

“(B) An assessment of how the waiver may impact the European energy resiliency strategy.

“(C) An explanation of the measures the Department of Defense is taking to mitigate the risk of using Russian Federation furnished energy.

“(c) DEFINITIONS.—In this section:

“(1) The term ‘covered military installation’ means a military installation in Europe identified by the Department of Defense as a main operating base.

“(2) The term ‘furnished energy’ means energy furnished to a covered military installation in any form and for any purpose, including heating, cooling, and electricity.”

Pub. L. 115–91, div. B, title XXVIII, §2880, Dec. 12, 2017, 131 Stat. 1875, provided that:

“(a) AUTHORITY.—The Secretary of Defense shall take appropriate measures, to the extent practicable, to—

“(1) reduce the dependency of all United States military installations in Europe on energy sourced inside Russia; and

“(2) ensure that all United States military installations in Europe are able to sustain operations in the event of a supply disruption.

“(b) CERTIFICATION REQUIREMENT.—Not later than December 31, 2021, the Secretary of Defense shall certify to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] whether or not at United States military installations in Europe the Department of Defense—

“(1) has taken significant steps to minimize to the extent practicable the dependency on energy sourced inside the Russian Federation at such installations; and

“(2) has the ability to sustain mission critical operations during an energy supply disruption.

“(c) DEFINITION OF ENERGY SOURCES INSIDE RUSSIA.—In this section, the term ‘energy sourced inside Russia’ means energy that is produced, owned, or facilitated by companies that are located in the Russian Federation or owned or controlled by the Government of the Russian Federation.”

**BUSINESS CASE ANALYSIS OF ANY PLAN TO DESIGN, REFURBISH, OR CONSTRUCT A BIOFUEL REFINERY**

Pub. L. 113–291, div. A, title III, §314, Dec. 19, 2014, 128 Stat. 3338, provided that: “Not later than 30 days before entering into a contract for the planning, design, refurbishing, or construction of a biofuel refinery, or of any other facility or infrastructure used to refine biofuels, the Secretary of Defense or the Secretary of the military department concerned shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a business case analysis for such planning, design, refurbishing, or construction.”

**GUIDANCE ON FINANCING FOR RENEWABLE ENERGY PROJECTS**

Pub. L. 112–239, div. B, title XXVIII, §2824, Jan. 2, 2013, 126 Stat. 2153, as amended by Pub. L. 113–291, div. A, title IX, §901(n)(2), Dec. 19, 2014, 128 Stat. 3469; Pub. L. 116–92, div. A, title IX, §902(81), Dec. 20, 2019, 133 Stat. 1553, provided that:

“(a) GUIDANCE ON USE OF AVAILABLE FINANCING APPROACHES.—

“(1) ISSUANCE.—Not later than 180 days after the date of the enactment of this Act [Jan. 2, 2013], the Secretary of Defense shall—

“(A) issue guidance about the use of available financing approaches for financing renewable energy projects; and

“(B) direct the Secretaries of the military departments to update their military department-wide guidance accordingly.

“(2) ELEMENTS.—The guidance issued pursuant to paragraph (1) should describe the requirements and restrictions applicable to the underlying authorities and any Department of Defense-specific guidelines for using appropriated funds and alternative-financing approaches for renewable energy projects to maximize cost savings and energy efficiency for the Department of Defense.

“(b) GUIDANCE ON USE OF BUSINESS CASE ANALYSES.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall issue guidance that establishes and clearly describes the processes used by the military departments to select financing approaches for renewable energy projects to ensure that business case analyses are completed to maximize cost savings and energy efficiency and mitigate drawbacks and risks associated with different financing approaches.

“(c) INFORMATION SHARING.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall develop a formalized communications process, such as a shared Internet website, that will enable officials at military installations to have timely access on an ongoing basis to information related to financing renewable energy projects on other installations, including best practices and lessons that officials at other installations have learned from their experiences in financing renewable energy projects.

“(d) CONSULTATION.—The Secretary of Defense shall issue the guidance under subsections (a) and (b) and develop the communications process under subsection (c) in consultation with the Under Secretary of Defense for Acquisition and Sustainment. The Secretary of Defense shall also issue the guidance under subsection (b) in consultation with the Secretaries of the military departments.”

**ENERGY-EFFICIENT TECHNOLOGIES IN CONTRACTS FOR LOGISTICS SUPPORT OF CONTINGENCY OPERATIONS**

Pub. L. 112–81, div. A, title III, §315, Dec. 31, 2011, 125 Stat. 1357, as amended by Pub. L. 116–92, div. A, title IX, §902(82), title XVII, §1731(e), Dec. 20, 2019, 133 Stat. 1553, 1816, provided that:

“(a) ENERGY PERFORMANCE MASTER PLAN.—The energy performance master plan for the Department of Defense developed under section 2911 of title 10, United States Code, shall specifically address the application of energy-efficient or energy reduction technologies or processes meeting the requirements of subsection (b) in logistics support contracts for contingency operations. In accordance with the requirements of such section, the plan shall include goals, metrics, and incentives for achieving energy efficiency in such contracts.

“(b) REQUIREMENTS FOR ENERGY TECHNOLOGIES AND PROCESSES.—Energy-efficient and energy reduction technologies or processes described in subsection (a) are technologies or processes that meet the following criteria:

“(1) The technology or process achieves long-term savings for the Government by reducing overall demand for fuel and other sources of energy in contingency operations.

“(2) The technology or process does not disrupt the mission, the logistics, or the core requirements in the contingency operation concerned.

“(3) The technology or process is able to integrate seamlessly into the existing infrastructure in the contingency operation concerned.

“(c) REGULATIONS AND GUIDANCE.—The Under Secretary of Defense for Acquisition and Sustainment shall issue such regulations and guidance as may be needed to implement the requirements of this section and ensure that goals established pursuant to subsection (a) are met. Such regulations or guidance shall consider the lifecycle cost savings associated with the energy technology or process being offered by a vendor for defense logistics support and oblige the offeror to demonstrate the savings achieved over traditional technologies.

“(d) REPORT.—The annual report required by section 2925(b) of title 10, United States Code, shall include information on the progress in the implementation of this section, including savings achieved by the Department resulting from such implementation.

“(e) DEFINITIONS.—In this section:

“(1) The term ‘defense logistics support contract’ means a contract for services, or a task order under such a contract, awarded by the Department of Defense to provide logistics support during times of military mobilizations, including contingency operations, in any amount greater than the simplified acquisition threshold.

“(2) The term ‘contingency operation’ has the meaning provided in section 101(a)(13) of title 10, United States Code.”

[Pub. L. 116–92, div. A, title XVII, §1731(e), Dec. 20, 2019, 133 Stat. 1816, provided that the amendment made by section 1731(e) to section 315 of Pub. L. 112–81, set

out above, is effective as of Dec. 31, 2011, and as if included in Pub. L. 112-81 as enacted. Consequently, the amendment made by section 902(82) of Pub. L. 116-92, which was directed to subsec. (d), was executed to subsec. (c) as redesignated by section 1731(e), to reflect the probable intent of Congress.]

#### POLICY OF PURSUING ENERGY SECURITY

Pub. L. 112-81, div. B, title XXVIII, §2822(a), Dec. 31, 2011, 125 Stat. 1691, provided that:

“(1) POLICY REQUIRED.—Not later than 180 days after the date of enactment of this Act [Dec. 31, 2011], the Secretary of Defense shall establish a policy for military installations that includes the following:

“(A) Favorable consideration for energy security in the design and development of energy projects on the military installation that will use renewable energy sources.

“(B) Guidance for commanders of military installations inside the United States on planning measures to minimize the effects of a disruption of services by a utility that sells natural gas, water, or electric energy to those installations in the event that a disruption occurs.

“(2) NOTIFICATION.—The Secretary of Defense shall provide notification to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] within 30 days after entering into any agreement for a facility energy project described in paragraph (1)(A) that excludes pursuit of energy security on the grounds that inclusion of energy security is cost prohibitive. The Secretary shall also provide a cost-benefit-analysis of the decision.

“(3) ENERGY SECURITY DEFINED.—In this subsection, the term ‘energy security’ has the meaning given that term in paragraph (3) of section 2924 of title 10, United States Code, as added by section 2821(a).”

#### DEADLINE FOR CONGRESSIONAL NOTIFICATION

Pub. L. 112-81, div. B, title XXVIII, §2823(b), Dec. 31, 2011, 125 Stat. 1692, provided that: “Not later than 180 days after the date of the enactment of this Act [Dec. 31, 2011], the Secretary of Defense shall notify the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] of the interim renewable energy goal established pursuant to the amendment made by subsection (a) [amending this section].”

#### DEPARTMENT OF DEFENSE TO CAPTURE AND TRACK DATA GENERATED IN METERING DEPARTMENT FACILITIES

Pub. L. 112-81, div. B, title XXVIII, §2827, Dec. 31, 2011, 125 Stat. 1694, provided that: “The Secretary of Defense shall require that the information generated by the installation energy meters be captured and tracked to determine baseline energy consumption and facilitate efforts to reduce energy consumption.”

#### TRAINING POLICY FOR DEPARTMENT OF DEFENSE ENERGY MANAGERS

Pub. L. 112-81, div. B, title XXVIII, §2829, Dec. 31, 2011, 125 Stat. 1694, provided that:

“(a) ESTABLISHMENT OF TRAINING POLICY.—The Secretary of Defense shall establish a training policy for Department of Defense energy managers designated for military installations in order to—

“(1) improve the knowledge, skills, and abilities of energy managers by ensuring understanding of existing energy laws, regulations, mandates, contracting options, local renewable portfolio standards, current renewable energy technology options, energy auditing, and options to reduce energy consumption;

“(2) improve consistency among energy managers throughout the Department in the performance of their responsibilities;

“(3) create opportunities and forums for energy managers to exchange ideas and lessons learned with-

in each military department, as well as across the Department of Defense; and

“(4) collaborate with the Department of Energy regarding energy manager training.

“(b) ISSUANCE OF POLICY.—Not later than 180 days after the date of the enactment of this Act [Dec. 31, 2011], the Secretary of Defense shall issue the training policy for Department of Defense energy managers. In creating the policy, the Secretary shall consider the best practices and certifications available in either the military services or in the private sector.

“(c) BRIEFING REQUIREMENT.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense, or designated representatives of the Secretary, shall brief the Committees on Armed Services of the Senate and House of Representatives regarding the details of the energy manager policy.”

#### PILOT PROGRAM ON COLLABORATIVE ENERGY SECURITY

Pub. L. 111-383, div. A, title II, §242, Jan. 7, 2011, 124 Stat. 4176, provided that:

“(a) PILOT PROGRAM.—The Secretary of Defense, in coordination with the Secretary of Energy, may carry out a collaborative energy security pilot program involving one or more partnerships between one military installation and one national laboratory, for the purpose of evaluating and validating secure, salable microgrid components and systems for deployment.

“(b) SELECTION OF MILITARY INSTALLATION AND NATIONAL LABORATORY.—If the Secretary of Defense carries out a pilot program under this section, the Secretary of Defense and the Secretary of Energy shall jointly select a military installation and a national laboratory for the purpose of carrying out the pilot program. In making such selections, the Secretaries shall consider each of the following:

“(1) A commitment to participate made by a military installation being considered for selection.

“(2) The findings and recommendations of relevant energy security assessments of military installations being considered for selection.

“(3) The availability of renewable energy sources at a military installation being considered for selection.

“(4) Potential synergies between the expertise and capabilities of a national laboratory being considered for selection and the infrastructure, interests, or other energy security needs of a military installation being considered for selection.

“(5) The effects of any utility tariffs, surcharges, or other considerations on the feasibility of enabling any excess electricity generated on a military installation being considered for selection to be sold or otherwise made available to the local community near the installation.

“(c) PROGRAM ELEMENTS.—A pilot program under this section shall be carried out as follows:

“(1) Under the pilot program, the Secretaries shall evaluate and validate the performance of new energy technologies that may be incorporated into operating environments.

“(2) The pilot program shall involve collaboration with the Office of Electricity Delivery and Energy Reliability of the Department of Energy and other offices and agencies within the Department of Energy, as appropriate, and the Environmental Security Technical Certification Program of the Department of Defense.

“(3) Under the pilot program, the Secretary of Defense shall investigate opportunities for any excess electricity created for the military installation to be sold or otherwise made available to the local community near the installation.

“(4) The Secretary of Defense shall use the results of the pilot program as the basis for informing key performance parameters and validating energy components and designs that could be implemented in various military installations across the country and at forward operating bases.

“(5) The pilot program shall support the effort of the Secretary of Defense to use the military as a test bed to demonstrate innovative energy technologies.

“(d) IMPLEMENTATION AND DURATION.—If the Secretary of Defense carries out a pilot program under this section, such pilot program shall begin by not later than July 1, 2011, and shall be not less than three years in duration.

“(e) REPORTS.—

“(1) INITIAL REPORT.—If the Secretary of Defense carries out a pilot program under this section, the Secretary shall submit to the appropriate congressional committees by not later than October 1, 2011, an initial report that provides an update on the implementation of the pilot program, including an identification of the selected military installation and national laboratory partner and a description of technologies under evaluation.

“(2) FINAL REPORT.—Not later than 90 days after completion of a pilot program under this section, the Secretary shall submit to the appropriate congressional committees a report on the pilot program, including any findings and recommendations of the Secretary.

“(f) DEFINITIONS.—For purposes of this section:

“(1) The term ‘appropriate congressional committees’ means—

“(A) the Committee on Armed Services, the Committee on Energy and Commerce, and the Committee on Science and Technology [now Committee on Science, Space, and Technology] of the House of Representatives; and

“(B) the Committee on Armed Services, the Committee on Energy and Natural Resources, and the Committee on Commerce, Science, and Transportation of the Senate.

“(2) The term ‘microgrid’ means an integrated energy system consisting of interconnected loads and distributed energy resources (including generators, energy storage devices, and smart controls) that can operate with the utility grid or in an intentional islanding mode.

“(3) The term ‘national laboratory’ means—

“(A) a national laboratory (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)); or

“(B) a national security laboratory (as defined in section 3281 of the National Nuclear Security Administration Act (50 U.S.C. 2471)).”

#### ENERGY SECURITY ON DEPARTMENT OF DEFENSE INSTALLATIONS

Pub. L. 111-84, div. A, title III, § 335, Oct. 28, 2009, 123 Stat. 2259, provided that:

“(a) PLAN FOR ENERGY SECURITY REQUIRED.—

“(1) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act [Oct. 28, 2009], the Secretary of Defense shall develop a plan for identifying and addressing areas in which the electricity needed to carry out critical military missions on Department of Defense installations is vulnerable to disruption.

“(2) ELEMENTS.—The plan developed under paragraph (1) shall include, at a minimum, the following:

“(A) An identification of the areas of vulnerability as described in paragraph (1), and an identification of priorities in addressing such areas of vulnerability.

“(B) A schedule for the actions to be taken by the Department to address such areas of vulnerability.

“(C) A strategy for working with other public or private sector entities to address such areas of vulnerability that are beyond the control of the Department.

“(D) An estimate of and consideration for the costs to the Department associated with implementation of the strategy.

“(b) WORK WITH NON-DEPARTMENT OF DEFENSE ENTITIES.—The Secretary of Defense shall work with other Federal entities, and with State and local government entities, to develop any regulations or other mechanisms needed to require or encourage actions to address areas of vulnerability identified pursuant to the plan

developed under subsection (a) that are beyond the control of the Department of Defense.”

#### CONSIDERATION OF FUEL LOGISTICS SUPPORT REQUIREMENTS IN PLANNING, REQUIREMENTS DEVELOPMENT, AND ACQUISITION PROCESSES

Pub. L. 110-417, [div. A], title III, § 332, Oct. 14, 2008, 122 Stat. 4420, as amended by Pub. L. 111-383, div. A, title X, § 1075(e)(5), Jan. 7, 2011, 124 Stat. 4374, provided that:

“(a) PLANNING.—In the case of analyses and force planning processes that are used to establish capability requirements and inform acquisition decisions, the Secretary of Defense shall require that analyses and force planning processes consider the requirements for, and vulnerability of, fuel logistics.

“(b) CAPABILITY REQUIREMENTS DEVELOPMENT PROCESS.—The Secretary of Defense shall develop and implement a methodology to enable the implementation of a fuel efficiency key performance parameter in the requirements development process for the modification of existing or development of new fuel consuming systems.

“(c) ACQUISITION PROCESS.—The Secretary of Defense shall require that the life-cycle cost analysis for new capabilities include the fully burdened cost of fuel during analysis of alternatives and evaluation of alternatives and acquisition program design trades.

“(d) IMPLEMENTATION PLAN.—The Secretary of Defense shall prepare a plan for implementing the requirements of this section. The plan shall be completed not later than 180 days after the date of the enactment of this Act [Oct. 14, 2008] and provide for the implementation of the requirements by not later than three years after the date of the enactment of this Act.

“(e) PROGRESS REPORT.—Not later than two years after the date of the enactment of this Act [Oct. 14, 2008], the Secretary of Defense shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a report describing progress made to implement the requirements of this section, including an assessment of whether the implementation plan required by subsection (d) is being carried out on schedule.

“(f) NOTIFICATION OF COMPLIANCE.—As soon as practicable during the three-year period beginning on the date of the enactment of this Act [Oct. 14, 2008], the Secretary of Defense shall notify the congressional defense committees that the Secretary has complied with the requirements of this section. If the Secretary is unable to provide the notification, the Secretary shall submit to the congressional defense committees at the end of the three-year period a report containing—

“(1) an explanation of the reasons why the requirements, or portions of the requirements, have not been implemented; and

“(2) a revised plan under subsection (d) to complete implementation or a rationale regarding why portions of the requirements cannot or should not be implemented.

“(g) FULLY BURDENED COST OF FUEL DEFINED.—In this section, the term ‘fully burdened cost of fuel’ means the commodity price for fuel plus the total cost of all personnel and assets required to move and, when necessary, protect the fuel from the point at which the fuel is received from the commercial supplier to the point of use.”

#### MITIGATION OF POWER OUTAGE RISKS FOR DEPARTMENT OF DEFENSE FACILITIES AND ACTIVITIES

Pub. L. 110-417, [div. A], title III, § 335, Oct. 14, 2008, 122 Stat. 4422, as amended by Pub. L. 114-92, div. A, title X, § 1079(d)(1), Nov. 25, 2015, 129 Stat. 999, provided that:

“(a) RISK ASSESSMENT.—The Secretary of Defense shall conduct a comprehensive technical and operational risk assessment of the risks posed to mission critical installations, facilities, and activities of the Department of Defense by extended power outages re-

sulting from failure of the commercial electricity supply or grid and related infrastructure.

“(b) RISK MITIGATION PLANS.—

“(1) IN GENERAL.—The Secretary of Defense shall develop integrated prioritized plans to eliminate, reduce, or mitigate significant risks identified in the risk assessment under subsection (a).

“(2) ADDITIONAL CONSIDERATIONS.—In developing the risk mitigation plans under paragraph (1), the Secretary of Defense shall—

“(A) prioritize the mission critical installations, facilities, and activities that are subject to the greatest and most urgent risks; and

“(B) consider the cost effectiveness of risk mitigation options.”

USE OF ENERGY EFFICIENT LIGHTING FIXTURES AND BULBS IN DEPARTMENT OF DEFENSE FACILITIES

Pub. L. 110-181, div. B, title XXVIII, §2863, Jan. 28, 2008, 122 Stat. 560, provided that:

“(a) CONSTRUCTION AND ALTERATION OF BUILDINGS.—Each building constructed or significantly altered by the Secretary of Defense or the Secretary of a military department shall be equipped, to the maximum extent feasible as determined by the Secretary concerned, with lighting fixtures and bulbs that are energy efficient.

“(b) MAINTENANCE OF BUILDINGS.—Each lighting fixture or bulb that is replaced in the normal course of maintenance of buildings under the jurisdiction of the Secretary of Defense or the Secretary of a military department shall be replaced, to the maximum extent feasible as determined by the Secretary concerned, with a lighting fixture or bulb that is energy efficient.

“(c) CONSIDERATIONS.—In making a determination under this section concerning the feasibility of installing a lighting fixture or bulb that is energy efficient, the Secretary of Defense or the Secretary of a military department shall consider—

“(1) the life cycle cost effectiveness of the fixture or bulb;

“(2) the compatibility of the fixture or bulb with existing equipment;

“(3) whether use of the fixture or bulb could result in interference with productivity;

“(4) the aesthetics relating to use of the fixture or bulb; and

“(5) such other factors as the Secretary concerned determines appropriate.

“(d) ENERGY STAR.—A lighting fixture or bulb shall be treated as being energy efficient for purposes of this section if—

“(1) the fixture or bulb is certified under the Energy Star program established by section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a); or

“(2) the Secretary of Defense or the Secretary of a military department has otherwise determined that the fixture or bulb is energy efficient.

“(e) SIGNIFICANT ALTERATIONS.—A building shall be treated as being significantly altered for purposes of subsection (a) if the alteration is subject to congressional authorization under section 2802 of title 10, United States Code.

“(f) WAIVER AUTHORITY.—The Secretary of Defense may waive the requirements of this section if the Secretary determines that such a waiver is necessary to protect the national security interests of the United States.

“(g) EFFECTIVE DATE.—The requirements of subsections (a) and (b) shall take effect one year after the date of the enactment of this Act [Jan. 28, 2008].”

REPORTING REQUIREMENTS RELATING TO RENEWABLE ENERGY USE BY DEPARTMENT OF DEFENSE TO MEET DEPARTMENT ELECTRICITY NEEDS

Pub. L. 110-181, div. B, title XXVIII, §2864, Jan. 28, 2008, 122 Stat. 561, related to reporting requirements relating to renewable energy use by Department of De-

fense to meet Department electricity needs, prior to repeal by Pub. L. 113-66, div. A, title X, §1084(b)(2)(B), Dec. 26, 2013, 127 Stat. 872.

UTILIZATION OF FUEL CELLS AS BACK-UP POWER SYSTEMS IN DEPARTMENT OF DEFENSE OPERATIONS

Pub. L. 109-364, div. A, title III, §358, Oct. 17, 2006, 120 Stat. 2164, provided that: “The Secretary of Defense shall consider the utilization of fuel cells as replacements for current back-up power systems in a variety of Department of Defense operations and activities, including in telecommunications networks, perimeter security, individual equipment items, and remote facilities, in order to increase the operational longevity of back-up power systems and stand-by power systems in such operations and activities.”

ENERGY EFFICIENCY IN WEAPONS PLATFORMS

Pub. L. 109-364, div. A, title III, §360(a), Oct. 17, 2006, 120 Stat. 2164, provided that: “It shall be the policy of the Department of Defense to improve the fuel efficiency of weapons platforms, consistent with mission requirements, in order to—

“(1) enhance platform performance;

“(2) reduce the size of the fuel logistics systems;

“(3) reduce the burden high fuel consumption places on agility;

“(4) reduce operating costs; and

“(5) dampen the financial impact of volatile oil prices.”

DEPARTMENT OF DEFENSE ENERGY EFFICIENCY PROGRAM

Pub. L. 107-107, div. A, title III, §317, Dec. 28, 2001, 115 Stat. 1054, directed the Secretary of Defense to carry out a program to significantly improve the energy efficiency of facilities of the Department of Defense through 2010 and to submit annual reports to the congressional defense committees through 2010 regarding the progress made toward achieving the energy efficiency goals.

**§ 2912. Availability and use of energy cost savings**

(a) AVAILABILITY.—An amount of the funds appropriated to the Department of Defense for a fiscal year that is equal to the amount of energy cost savings realized by the Department, including financial benefits resulting from shared energy savings contracts entered into under section 2913 of this title, shall remain available for obligation under subsection (b) or (c), as the case may be, until expended, without additional authorization or appropriation.

(b) USE.—Except as provided in subsection (c) with respect to operational energy cost savings, the Secretary of Defense shall provide that the amount that remains available for obligation under subsection (a) and the funds made available under section 2916(b)(2) of this title shall be used as follows:

(1) One-half of the amount shall be used for the implementation of additional energy resilience, mission assurance, weather damage repair and prevention, energy conservation, and energy security measures, including energy resilience and energy conservation construction projects, at buildings, facilities, or installations of the Department of Defense or related to vehicles and equipment of the Department, which are designated, in accordance with regulations prescribed by the Secretary of Defense, by the head of the department, agency, or instrumentality that realized the savings referred to in subsection (a).